

**REMARKS**

In the Office Action Summary February 24, 2006, claims 18-, 10-20, 22, and 23 are pending and stand rejected. Applicant's representative believes 18- is a typographical error which should have been entered as claims 1-8. It is also noted that claim 12 was cancelled in the last amendment filed December 7, 2005. Appropriate correction is respectfully requested. Claim 13 has been canceled without prejudice or disclaimer and claims 1, 14-18, 20, 22, 22 and 23 have been amended. No new matter has been added. Reexamination and reconsideration of the claims as requested is respectfully requested.

On page 2 of the Office Action, claims 1-7, 11-14, 16-19, and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson, et al. (U.S. Patent No. 6,436,127) in combination with Chernoff (U.S. Patent No. 6,135,994) and Sator, et al. ("Objective assessment of photoageing effects using high-frequency ultrasound in PUVA-treated psoriasis patients," *British Journal of Dermatology*, vol. 147, 2002, pp. 291-298). The Applicant respectfully traverses this rejection, but has amended the application to overcome the objections for the reasons set forth below.

On page 2 of the Office Action, claims 8, 10, 20, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson, et al. in combination with Chernoff and Sator, et al. as applied to claims 1-7, 11-19, and 23 and further in combination with Mueller, et al. (U.S. Patent No. 6,238,386). The Applicant respectfully traverses this rejection, but has amended the application to overcome the objections for the reasons set forth below.

On page 3 of the Office Action, claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson, et al. in combination with Chernoff and Sator, et al. as applied to claims 1-7, 11-19, and 23 and further in combination with Bonis, et al. ("308 nm UVB excimer laser for psoriasis," *The Lancet*, vol. 350, November 22, 1997, pp. 1522). The Applicant respectfully traverses this rejection, but has amended the application to overcome the objections for the reasons set forth below.

The current Office Action uses the Anderson, et al. reference in combination with references used in the prior Office Action. Thus, the Anderson reference is the cornerstone of the current rejection of claims.

The Examiner has stated that Anderson teaches a treatment regime by determining skin thinness to determine psoriatic areas. Assuming that is so, Anderson still lacks the suggestion how one would use that information to control dosing of UV exposure.

According to Anderson, et al., a patient's skin is scanned in order to *designate those areas of the skin affected by a skin disease* whereupon only the affected areas of skin are treated with a high dose of UV radiation. However, there is no hint to regulate the UV radiation depending on the epidermis thickness. Analyzing the skin is only used to identify the affected areas, but there is no regulation of UV radiation depending on the specific consistency of the affected areas. In fact, Anderson, et al. simply uses multiples of the minimal erythematic dose (MED) which is measured in normal skin (col. 2, l. 12, col. 4, ll. 33-34).

In contrast, according to the invention, the UV radiation dose is regulated depending on the epidermis thickness detected and based on the UV radiation dose *showing a visible redness without blister formation in the skin area affected by Psoriasis*. This value has been established for the first time by the Applicant and is called the MED-I (minimal erythematic dose of the involved skin) in contrast to MED which is the minimal erythematic dose of normal skin. This is not a trivial difference. Determining a specific UV radiation dose for different parts of the skin affected by Psoriasis allows a more effective treatment combining faster treatment success with less side effects.

The invention recognizes that the MED-I value depends mainly on the epidermis thickness. This epidermis thickness can vary considerably from one Psoriasis plaque to the next one. Therefore, it is very useful to regulate the UV radiation dose individually for different plaques. In contrast, Anderson, et al. determines the nature of the skin much less accurately. The only differentiation they make is the differentiation between normal skin and affected skin. Obviously, the UV radiation dose is not regulated individually for different parts of affected skin.

The invention is not made obvious by Anderson, et al. in combination with Chernoff, a reference already distinguished in the last office action response. As stated in the last response, Chernoff uses ultrasound to determine the depth of tissue under the epidermis, not the epidermis itself (see col. 1, lines 57-59). Likewise, Chernoff does not disclose a method of treatment for Psoriasis. Accordingly, there is no hint by Chernoff to regulate the UV radiation dose in dependence of the epidermis thickness of plaques affected by Psoriasis nor is there any hint to determine a UV radiation dose showing a visible redness without blister formation in an affected skin area. *In fact, the MED-I value as well as the correlation between the MED-I and the epidermis thickness have been established for the first time by the applicant. It is therefore hard to imagine how Anderson, which lacks the insight to regulating UV radiation in response to skin depth, can be combined with Chernoff which skips skin dept and goes to tissue dept, to make an obviousness rejection.* To make such a rejection would require a direct violation of MPEP section 2143, which requires suggestion or motivation

#### 2143 Basic Requirements of a Prima Facie Case of Obviousness

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Clearly, there is no such motivation or suggestion from either reference;

The invention is not made obvious by Sator, et al. either, *not to mention the extremely remoteness of MPEP section 2143 being satisfied by three disparate references who much suggest their combination.* Sator seems to show that PUVA treatment accelerates thinning of the skin. That is good information, but does not lead one to the solution of the present invention. In short, Sator, et al. does not suggest to regulate the UV radiation dose in dependence on the epidermis thickness and/or the MED-I.

Thus, any combination of the cited references does not make claim 1 obvious, without the benefit of hindsight or extrapolating a suggestion in each of the three citations, but both approaches would violate MPEP sec 2143.

From the Advisory Action, it is the Examiner's belief that the application is not in condition for allowance because "Applicant's arguments are narrower than the claim language: there is no specific requirement in the claims that the radiation applied to the pathological skin be varied." However, Applicant's representative respectfully submits that regulating the laser radiation dose based on the dose that causes a visible redness without blister formation and based on the thickness of the epidermis means also a variation of the radiation dose in case the affected skin areas vary from each other. The remaining claims add additional features not found in the cited art and should likewise be considered independently allowable. Arguments to each of these claims have already been presented in the prior office action response, and are accessible to the examiner. They are not reiterated for the sake of brevity.

### **CONCLUSION**

In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. The amendments clarify the patentable invention without adding new subject matter. Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.

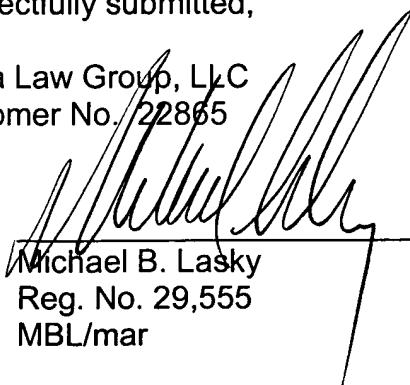
If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's attorney of record, Michael B. Lasky at (952) 253-4106.

Respectfully submitted,

Altera Law Group, LLC  
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Date: September 20, 2006

By:

  
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